

Claims:

1. A method for descaling and/or cleaning of a metal casting, particularly a hot-rolled strip made of normal steel or of stainless steel, wherein the metal casting is guided in a direction of conveyance through a device inside which it is subjected to a plasma descaling and/or plasma cleaning, characterized in that before the device for plasma descaling and/or plasma cleaning, in the direction of conveyance, the metal casting is subjected to a stretcher levelling or a stretcher-and-roller levelling process which imparts a high degree of flatness to the metal casting.
2. The method according to claim 1, characterized in that a tensile force is exerted such that a tensile stress arises in the metal casting which corresponds to at least 10% of the yield point of the metal casting material.
3. The method according to claim 1 or 2, characterized in that the metal casting is continuously guided through the device for plasma descaling and/or plasma cleaning.
4. The method according to claim 1 or 2, characterized in that the metal casting is discontinuously guided through the device for plasma descaling and/or plasma cleaning.
5. The method according to one of claims 1 to 4, characterized in that after the device for plasma descaling and/or plasma cleaning an inspection of the surface of the metal casting is performed, wherein the speed with which the metal casting is guided through the device for plasma descaling and/or plasma cleaning is specified in the closed-loop control in dependence on the inspection, such that the desired quality of descaling and/or cleaning is attained.

6. The method according to one of claims 1 to 5, characterized in that the metal casting following descaling and/or cleaning is coated with liquid metal, in particular in a hot galvanizing.

7. The method according to claim 6, characterized in that the metal casting after descaling and/or cleaning and prior to coating with liquid metal is subjected to heating, in particular induction heating.

8. The method according to one of claims 1 to 7, characterized in that the metal casting following descaling and/or cleaning is cold-rolled.

9. A device for descaling and/or cleaning of a metal casting, particularly a hot-rolled strip made of normal steel or of stainless steel, particularly by carrying out the method according to one of claims 1 to 8 which feature a device through which the metal casting is guided in a direction of conveyance and inside which the metal casting is subjected to a plasma descaling and/or plasma cleaning, characterized by means which are arranged before the device for plasma descaling and/or plasma cleaning in the direction of conveyance and which impart a high degree of flatness to the metal casting, wherein before and/or behind the means at least one stretching device is arranged for producing a tensile force in the metal casting.

10. The device according to claim 9, characterized in that the device for plasma descaling and/or plasma cleaning exhibits a treatment chamber under vacuum inside which a number of modularly built electrodes are arranged in the direction of conveyance of the metal casting.

11. The device according to claim 10, characterized in that the individual electrodes can be switched on or off independently of one another in dependence on the degree of scaling and/or degree of contamination of the surface of the metal casting as well as in dependence on the speed with which the metal casting passes through the plasma device for plasma descaling and/or plasma cleaning.

12. The device according to one of claims 9 to 11, characterized in that inspection means for inspecting the surface of the metal casting are arranged behind the device for plasma descaling and/or plasma cleaning in the direction of conveyance, which are connected with control means, wherein the control means set the speed with which the metal casting is conveyed through the device for plasma descaling and/or plasma cleaning, in dependence on the inspection for attaining the desired descaling and/or cleaning quality of the metal casting.

13. The device according to one of claims 9 to 12, characterized in that means for coating the metal casting with liquid metal, in particular for hot galvanizing are arranged behind the device for plasma descaling and/or plasma cleaning in the direction of conveyance.

14. The device according to one of claims 9 to 13, characterized in that means for cold-rolling the metal casting are arranged behind the device for plasma descaling and/or plasma cleaning in the direction of conveyance.